TITLE: Bread improver compsns. comprising cellulase and other enzyme - oxidase and/or peroxidase to improve specific vol., staling resistance and crumb structure

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Term	Documents
@PY	36858021
(1 AND (@PY <= "1998")).PGPB,USPT,USOC,EPAB,JPAB,DWPI.	51
(L1 AND @PY<=1998).PGPB,USPT,USOC,EPAB,JPAB,DWPI.	51

Display Format: - Change Format

Previous Page Next Page Go to Doc#

Hit List

First Hit | Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Search Results - Record(s) 1 through 50 of 51 returned.

☐ 1. Document ID: US 5837515 A

Using default format because multiple data bases are involved.

L2: Entry 1 of 51 File: USPT Nov 17, 1998

US-PAT-NO: 5837515
DOCUMENT-IDENTIFIER: US 5837515 A

TITLE: Enzyme preparations and methods for their production

DATE-ISSUED: November 17, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Suominen; Pirkko	Helsinki			FI
Nevalainen; Helena	North Epping			AU
Saarelainen; Ritva	Helsinki			FI
Paloheimo; Marja	Helsinki			FI
Fagerstrom; Richard	Espoo			FI

US-CL-CURRENT: 435/200; 435/252.3, 435/254.11, 435/254.6, 435/320.1, 435/325, 536/23.2, 536/23.74

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw D

☐ 2. Document ID: US 5792499 A

L2: Entry 2 of 51 File: USPT Aug 11, 1998

US-PAT-NO: 5792499
DOCUMENT-IDENTIFIER: US 5792499 A

TITLE: Method for reducing syruping in refrigerated doughs

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw D

☐ 3. Document ID: US 5786316 A

L2: Entry 3 of 51 File: USPT Jul 28, 1998

US-PAT-NO: 5786316
DOCUMENT-IDENTIFIER: US 5786316 A

TITLE: Cleaning compositions comprising xylanases

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

☐ 4. Document ID: US 5714474 A

L2: Entry 4 of 51 File: USPT Feb 3, 1998

US-PAT-NO: 5714474
DOCUMENT-IDENTIFIER: US 5714474 A
** See image for Certificate of Correction **

TITLE: Production of enzymes in seeds and their use

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

☐ 5. Document ID: US 5693518 A

L2: Entry 5 of 51 File: USPT Dec 2, 1997

US-PAT-NO: 5693518
DOCUMENT-IDENTIFIER: US 5693518 A

TITLE: Enzymes with xylanase activity from Aspergillus aculeatus

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

☐ 6. Document ID: US 5650188 A

L2: Entry 6 of 51 File: USPT Jul 22, 1997

US-PAT-NO: 5650188
DOCUMENT-IDENTIFIER: US 5650188 A

TITLE: Baking improver compositions

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

☐ 7. Document ID: US 5610048 A

L2: Entry 7 of 51 File: USPT Mar 11, 1997

US-PAT-NO: 5610048
DOCUMENT-IDENTIFIER: US 5610048 A

TITLE: Xylanase, DNA sequences, coding for the xylanases and methods of use thereof

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

☐ 8. Document ID: US 5543576 A

L2: Entry 8 of 51 File: USPT Aug 6, 1996

US-PAT-NO: 5543576
DOCUMENT-IDENTIFIER: US 5543576 A

TITLE: Production of enzymes in seeds and their use

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

---

☐ 9. Document ID: US 5514404 A

L2: Entry 9 of 51 File: USPT May 7, 1996

US-PAT-NO: 5514404
DOCUMENT-IDENTIFIER: US 5514404 A

TITLE: Tenderized baked good production with reduced fat, low fat, or no added fat

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

---

☐ 10. Document ID: US 5514387 A

L2: Entry 10 of 51 File: USPT May 7, 1996

US-PAT-NO: 5514387
DOCUMENT-IDENTIFIER: US 5514387 A

TITLE: Calcium-enriched baked good production and method of making

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

---

☐ 11. Document ID: US 5447738 A

L2: Entry 11 of 51 File: USPT Sep 5, 1995

US-PAT-NO: 5447738
DOCUMENT-IDENTIFIER: US 5447738 A

TITLE: Deep-frozen, pre-proofed doughs

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

---

☐ 12. Document ID: US 5405769 A

L2: Entry 12 of 51 File: USPT Apr 11, 1995

US-PAT-NO: 5405769
DOCUMENT-IDENTIFIER: US 5405769 A

TITLE: Construction of thermostable mutants of a low molecular mass xylanase

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

---

13. Document ID: US 5358864 A

L2: Entry 13 of 51 File: USPT Oct 25, 1994

US-PAT-NO: 5358864
DOCUMENT-IDENTIFIER: US 5358864 A
** See image for Certificate of Correction **

TITLE: Cloning and expression of xylanase genes from fungal origin

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

14. Document ID: US 5306633 A

L2: Entry 14 of 51 File: USPT Apr 26, 1994

US-PAT-NO: 5306633
DOCUMENT-IDENTIFIER: US 5306633 A

TITLE: Bacterial xylanase, method for its production, bacteria producing a xylanase, DNA fragment encoding a xylanase, plasmid containing the DNA fragment, baking agents containing a xylanase, and method for producing bread and baked goods using the xylanase

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

15. Document ID: US 5254351 A

L2: Entry 15 of 51 File: USPT Oct 19, 1993

US-PAT-NO: 5254351
DOCUMENT-IDENTIFIER: US 5254351 A

TITLE: Deep-frozen, pre-proofed doughs

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

16. Document ID: US 5176927 A

L2: Entry 16 of 51 File: USPT Jan 5, 1993

US-PAT-NO: 5176927
DOCUMENT-IDENTIFIER: US 5176927 A

TITLE: Method of improving the production process of dry cereal products by enzyme addition

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

17. Document ID: US 5108765 A

L2: Entry 17 of 51 File: USPT Apr 28, 1992

US-PAT-NO: 5108765

DOCUMENT-IDENTIFIER: US 5108765 A

TITLE: Composition for improving the properties of dough and method of using same

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

---

☐ 18. Document ID: US 5108764 A

L2: Entry 18 of 51 File: USPT Apr 28, 1992

US-PAT-NO: 5108764
DOCUMENT-IDENTIFIER: US 5108764 A

TITLE: Production of crackers with reduced or no added fat

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

---

☐ 19. Document ID: US 4990343 A

L2: Entry 19 of 51 File: USPT Feb 5, 1991

US-PAT-NO: 4990343
DOCUMENT-IDENTIFIER: US 4990343 A

TITLE: Enzyme product and method of improving the properties of dough and the quality of bread

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

---

☐ 20. Document ID: JP 08084567 A

L2: Entry 20 of 51 File: JPAB Apr 2, 1996

PUB-NO: JP408084567A
DOCUMENT-IDENTIFIER: JP 08084567 A
TITLE: MODIFIED FLOUR AND PRODUCTION OF BAKED CAKE USING THE FLOUR

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

---

☐ 21. Document ID: JP 08084557 A

L2: Entry 21 of 51 File: JPAB Apr 2, 1996

PUB-NO: JP408084557A
DOCUMENT-IDENTIFIER: JP 08084557 A
TITLE: PREPARATION OF BAKED CAKE

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

---

☐ 22. Document ID: WO 9722691 A1

L2: Entry 22 of 51 File: EPAB Jun 26, 1997

PUB-NO: WO009722691A1
DOCUMENT-IDENTIFIER: WO 9722691 A1
TITLE: NOVEL XYLANASES AND USES THEREOF

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

---

☐ 23. Document ID: WO 9523515 A1

L2: Entry 23 of 51 File: EPAB Sep 8, 1995

PUB-NO: WO009523515A1
DOCUMENT-IDENTIFIER: WO 9523515 A1
TITLE: USE OF XYLANASE IN BAKING

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

---

☐ 24. Document ID: WO 9421785 A1

L2: Entry 24 of 51 File: EPAB Sep 29, 1994

PUB-NO: WO009421785A1
DOCUMENT-IDENTIFIER: WO 9421785 A1
TITLE: ENZYMES WITH XYLANASE ACTIVITY FROM ASPERGILLUS ACULEATUS

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

---

☐ 25. Document ID: EP 542353 A1

L2: Entry 25 of 51 File: EPAB May 19, 1993

PUB-NO: EP000542353A1
DOCUMENT-IDENTIFIER: EP 542353 A1
TITLE: Improved, deep-frozen, pre-proofed doughs - II.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

---

☐ 26. Document ID: EP 507723 A1

L2: Entry 26 of 51 File: EPAB Oct 7, 1992

PUB-NO: EP000507723A1
DOCUMENT-IDENTIFIER: EP 507723 A1
TITLE: Xylanase, corresponding recombinant DNA sequence, xylanase containing agent, and use of the agent.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

---

☐ 27. Document ID: EP 493850 A1

L2: Entry 27 of 51 File: EPAB Jul 8, 1992

PUB-NO: EP000493850A1
DOCUMENT-IDENTIFIER: EP 493850 A1

TITLE: Improved, deep-frozen, preproofed doughs.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 28. Document ID: WO 9119782 A1

L2: Entry 28 of 51 File: EPAB Dec 26, 1991

PUB-NO: WO009119782A1
DOCUMENT-IDENTIFIER: WO 9119782 A1
TITLE: XYLANASE PRODUCTION

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 29. Document ID: EP 396162 A1

L2: Entry 29 of 51 File: EPAB Nov 7, 1990

PUB-NO: EP000396162A1
DOCUMENT-IDENTIFIER: EP 396162 A1
TITLE: Bread improvers.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 30. Document ID: RD 415008 A

L2: Entry 30 of 51 File: DWPI Nov 10, 1998

DERWENT-ACC-NO: 1999-022645
DERWENT-WEEK: 199902
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Improved quality bread - obtained by baking dough in pressurised oven in the presence of enzymes

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 31. Document ID: WO 9727291 A1, AU 9714376 A

L2: Entry 31 of 51 File: DWPI Jul 31, 1997

DERWENT-ACC-NO: 1997-393679
DERWENT-WEEK: 199749
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Myceliophthora thermophila CBS 117.65 DNA encoding a xylanase - useful in providing enzyme for food and animal feed preparation, beer production and paper bleaching

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 32. Document ID: WO 9727290 A1, AU 9714375 A

L2: Entry 32 of 51 File: DWPI Jul 31, 1997

DERWENT-ACC-NO: 1997-393678
DERWENT-WEEK: 199749
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Meripilus giganteus CBS 521.95 DNA encoding a xylanase - useful in providing enzyme for food preparation, animal feed preparation, beer production and paper bleaching

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

---

☐ 33. Document ID: WO 9722691 A1, AU 9710995 A, EP 868506 A1, US 5922579 A

L2: Entry 33 of 51 File: DWPI Jun 26, 1997

DERWENT-ACC-NO: 1997-341682
DERWENT-WEEK: 199731
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Cell free composition containing Chaetomium thermophilus xylanase(s) - used to degrade xylan-containing substrates, especially wood pulp, animal feed and flour, e.g. to facilitate bleaching

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

---

☐ 34. Document ID: WO 9714803 A1, JP 11514235 W, AU 9672932 A, EP 857215 A1, NO 9801707 A, HU 9900738 A2

L2: Entry 34 of 51 File: DWPI Apr 24, 1997

DERWENT-ACC-NO: 1997-245118
DERWENT-WEEK: 200008
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Heat stable xylanase - useful especially in bleaching of paper pulp and for production of xylose and related oligosaccharide(s) from plant material

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

---

☐ 35. Document ID: JP 08084557 A

L2: Entry 35 of 51 File: DWPI Apr 2, 1996

DERWENT-ACC-NO: 1996-224155
DERWENT-WEEK: 199623
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Prepn. of food - by adding xylanase to dough contg. wheat flour, moulding and baking

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

---

☐ 36. Document ID: US 7022827 B2, AU 9525086 A, EP 698667 A1, BR 9503454 A, FI 9503578 A, CA 2154628 A, JP 08092284 A, BE 1008570 A3, BE 1008751 A3, NZ 272637 A, AU 711105 B, US 6346407 B1, US 20020115181 A1, EP 698667 B1, DE 69533152 E, DE 69533152 T2, US 20060020122 A1

L2: Entry 36 of 51 File: DWPI Apr 4, 2006

DERWENT-ACC-NO: 1996-117341
DERWENT-WEEK: 200624
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Bacillus derived xylanase active over wide pH range - used in treatment of paper pulp, animal feeds and in bakery goods

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

---

☐ 37. Document ID: WO 9523515 A1, AU 9519453 A

L2: Entry 37 of 51 File: DWPI Sep 8, 1995

DERWENT-ACC-NO: 1995-320338
DERWENT-WEEK: 199541
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Improving properties of dough and/or baked prod. made from dough - by adding enzyme prepn. comprising xylanase obtainable from strain of fungal species A. aculaetus to dough

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

---

☐ 38. Document ID: CN 1105184 C, WO 9502044 A1, AU 9470689 A, EP 707641 A1, FI 9600059 A, BR 9406998 A, JP 08512201 W, NZ 267985 A, AU 682047 B, CN 1127013 A, US 5854050 A, US 5998190 A, US 6190905 B1, KR 327865 B, KR 327882 B, EP 707641 B1, CN 1412310 A, DE 69432818 E, ES 2202325 T3, JP 2004236663 A

L2: Entry 38 of 51 File: DWPI Apr 9, 2003

DERWENT-ACC-NO: 1995-066892
DERWENT-WEEK: 200538
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: New acid proteases from Aspergillus aculeatus - related expression vectors and transformed cells, useful for degrading plant cell components, cleaning contact lenses, in prepn. of baked goods etc.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

---

☐ 39. Document ID: EP 1479765 A2, WO 9421785 A1, AU 9462024 A, EP 695349 A1, AU 679211 B, US 5693518 A, US 5885819 A, US 6080567 A, US 6197564 B1, US 6228630 B1, EP 695349 B1, DE 69433499 E

L2: Entry 39 of 51 File: DWPI Nov 24, 2004

DERWENT-ACC-NO: 1994-317006
DERWENT-WEEK: 200477

COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: New xylanase enzymes from Aspergillus aculeatus - used for degrading plant cell wall components, e.g. in the prepn. of feed, in baking and in prepn. of pulp or paper

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

---

☐ 40. Document ID: WO 9404664 A1, BR 9306980 A, AU 9349446 A, FI 9500852 A, EP 663949 A1, JP 08500485 W

L2: Entry 40 of 51 File: DWPI Mar 3, 1994

DERWENT-ACC-NO: 1994-083184
DERWENT-WEEK: 199908
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Novel xylanase - possess high activity and stability at alkaline conditions and high temps. and have similar immunochemical properties to a xylanase derived from Bacillus sp DSM 7197

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

---

☐ 41. Document ID: FI 115918 B1, DE 4226528 A1, EP 585617 A2, FI 9303519 A, US 5306633 A, EP 585617 A3, EP 585617 B1, DE 59307538 G, ES 2110035 T3

L2: Entry 41 of 51 File: DWPI Aug 15, 2005

DERWENT-ACC-NO: 1994-058089
DERWENT-WEEK: 200557
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: New xylanase obtd. from Bacillus subtilis - useful in baking agents for increased vol. of baking prods.

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

---

☐ 42. Document ID: WO 9325693 A1, BR 9306580 A, AU 9343479 A, EP 652961 A1, JP 08501444 W, NZ 253280 A, AU 696768 B

L2: Entry 42 of 51 File: DWPI Dec 23, 1993

DERWENT-ACC-NO: 1994-007550
DERWENT-WEEK: 199903
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Recombinant truncated xylanase(s) and DNA - are highly specific for xylan(s) and produced in high yield, used in paper, pulp, food and feed industries

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

---

☐ 43. Document ID: WO 9322928 A1, AU 9340639 A, EP 668723 A1, US 5447738 A, ZA 9303287 A

L2: Entry 43 of 51 File: DWPI Nov 25, 1993

DERWENT-ACC-NO: 1993-386102
DERWENT-WEEK: 199348
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Deep frozen, pre proofed doughs - comprising conventional dough with specific improvers to increase tan delta and decrease elastic modulus

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 44. Document ID: EP 542353 A1, ES 2078648 T3, AU 9228276 A, CA 2082903 A, ZA 9208726 A, EP 542353 B1, DE 69204623 E

L2: Entry 44 of 51 File: DWPI May 19, 1993

DERWENT-ACC-NO: 1993-160845
DERWENT-WEEK: 199606
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Deep frozen pre-proofed dough prods. - contg. gelling pectin to give improved specific vol or oven-spring to baked goods

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 45. Document ID: FI 116795 B1, EP 507723 A1, WO 9217573 A1, NZ 242201 A, FI 9304330 A, NO 9303525 A, EP 579672 A1, JP 06506348 W, US 5610048 A, EP 579672 B1, DE 69228378 E, ES 2130173 T3, KR 234888 B1, JP 3483880 B2

L2: Entry 45 of 51 File: DWPI Feb 28, 2006

DERWENT-ACC-NO: 1992-333928
DERWENT-WEEK: 200617
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Immuno-reactive xylanase - used in corresp. recombinant DNA sequence, as baking agent, fodder additive

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 46. Document ID: EP 493850 A1, AU 635455 B, AU 9190031 A, CA 2058069 A, DE 69102261 E, EP 493850 B1, ES 2054436 T3, FI 9106107 A, JP 05041938 A, JP 95102065 B2, US 5254351 A, ZA 9110161 A

L2: Entry 46 of 51 File: DWPI Jul 8, 1992

DERWENT-ACC-NO: 1992-227455
DERWENT-WEEK: 199228
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Gelatin contg. deep frozen pre-proofed dough - giving prods. with improved specific vol. and oven spring e.g. buns and danish pastries

Full | Title | Citation | Front | Review | Classification | Date | Reference | Claims | KWIC | Draw De

☐ 47. Document ID: EP 487122 A2, AU 9187955 A, CA 2055753 A, EP 487122 A3, JP 04311338 A, ZA 9109214 A

L2: Entry 47 of 51 File: DWPI May 27, 1992

DERWENT-ACC-NO: 1992-176736
DERWENT-WEEK: 199222
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Fat-free pastry mix - contg. egg white, sugar, starch, flour and opt. baking powder, enzyme or aerating additives

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

☐ 48. Document ID: ES 2086267 T3, EP 463706 A, WO 9201389 A, WO 9201793 A, AU 9183186 A, AU 9183205 A, FI 9201231 A, FI 9201232 A, NO 9201133 A, PT 98419 A, NO 9201134 A, HU 60606 T, JP 05500907 W, JP 05501657 W, NZ 239083 A, NZ 239085 A, HU 63881 T, AU 647170 B, US 5358864 A, AU 654147 B, ES 2086267 T1, IE 68859 B, HU 215234 B, NO 307347 B1, FI 108944 B1, EP 463706 B1, DE 69133201 E

L2: Entry 48 of 51 File: DWPI Oct 1, 2003

DERWENT-ACC-NO: 1992-009297
DERWENT-WEEK: 200371
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: DNA encoding xylanase of fungal origin - used for producing xylanase for use in e.g. bread prodn., animal feed or kraft pulp processing

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

☐ 49. Document ID: DE 4017150 A, WO 9118977 A

L2: Entry 49 of 51 File: DWPI Dec 5, 1991

DERWENT-ACC-NO: 1991-362356
DERWENT-WEEK: 199150
COPYRIGHT 2006 DERWENT INFORMATION LTD

TITLE: Prodn. of pentosanase compsn. with better baking activity - by growing microorganism on fermentation medium contg. beta-methyl-xyloside and opt. xylan

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | Claims | KWIC | Draw De

☐ 50. Document ID: EP 396162 A, CA 2012723 C, AU 9052061 A, CA 2012723 A, JP 03035749 A, ZA 9002266 A, US 5108765 A, JP 92057302 B, EP 396162 B1, DE 69000722 E, ES 2054212 T3, EP 396162 B2

L2: Entry 50 of 51 File: DWPI Nov 7, 1990

DERWENT-ACC-NO: 1990-336620
DERWENT-WEEK: 199711
COPYRIGHT 2006 DERWENT INFORMATION LTD

L2: Entry 7 of 51 File: USPT Mar 11, 1997

DOCUMENT-IDENTIFIER: US 5610048 A
TITLE: Xylanase, DNA sequences, coding for the xylanases and methods of use thereof

Abstract Text (1):
The xylanase is characterized by several partial amino acid sequences and is immunoreactive with an antibody raised against a purified xylanase derived from Humicola insolens, DSM 1800. This xylanase preparation is practically free of cellulase xylanase and is well suited for treatment of paper pulp, as a baking agent and as an additive to fodder.

YEAR ISSUED (1):
1997

Brief Summary Text (5):
There are currently five major applications for xylanases; 1) enzymatic breakdown of agricultural wastes for production of alcohol fuels; 2) enzymatic modification of animal feeds or feed components or addition to animal feeds for in vivo breakdown of the hemicellulose fraction; 3) use as a baking agent; 4) manufacturing of dissolving pulps yielding cellulose; and 5) bio-bleaching of wood pulp. [Detroym R. W. In: Organic Chemicals from Biomass, (CRC Press, Boca Raton, Fla., 1981) 19-41.; Paice, M. G., and L. Jurasek. J. Wood Chem. Technol. 4: 187-198.; Pommier, J. C., J. L. Fuentes, G. Goma. Tappi Journal (1989): 187-191.; Senior, D. J., et al., Biotechnol. Letters 10 (1988):907-912.]

Brief Summary Text (12):
Humicola insolens xylanases have been described (Yoshioka, H. et al., Agric. Biol. Chem. 43(3) (1981) 579-586). In the crude preparation they have a pH-optimum of 6.0 and a temperature optimum of 60.degree. C. At pH 9 they show 25% of the activity at pH 6. According to the information in the article the enzymes were not purified and will therefore contain significant cellulase activity, as H. insolens is known as a good cellulase producer, reference being made to U.S. Pat. No. 4,435,307. Further the enzymes are not characterized with respect to cellulases. M.sub.w, pl or amino acid composition and has not been tested on kraft pulps, in baking or for animal feed.

Brief Summary Text (14):
Thus, it is the purpose of the invention to provide a xylanase, which can be produced as a preparation with very small amounts of other enzyme activities, especially cellulase activities and other xylanase activities, and which is well suited for use in delignification of kraft pulp, as a baking agent and as an additive to animal fodder.

Detailed Description Text (9):
Surprisingly, it has been found that it is possible to produce the xylanase according to the invention as part of a xylanase preparation, which contains enzymatic activities, e.g. cellulases besides xylanase in very small concentrations. Especially, it has to be noted that the xylanase according to the invention is a special xylanase selected among the several xylanases produced inherently from Humicola insolens, DSM 1800, which is excellently suited both as an agent for addition to paper pulp, as a baking agent and as an additive to animal fodder. Also, it has been found that the xylanase according to the invention exhibits a specific activity which is larger than the specific activity of any of the prior art xylanases. It is most surprising that the xylanase according to the

invention exhibits superior properties in relation to all these technical areas, which are otherwise unrelated to each other.

Detailed Description Text (14):
Xylanase (the designation pentosanase is commonly used in the baking industry) is used as a baking agent for wheat bread for several purposes:

Detailed Description Text (21):
The pH in dough is 6.0 to 5.5 which makes this xylanase ideal for the use as a baking agent, as the pH optimum of the xylanase according to the invention is 5.5 to 7.5.

Detailed Description Text (66):
Example 1 illustrates the selection of the xylanase producing gene and production of the xylanase by means of a genetic modified host organism. Example 2 illustrates the production in pilot plant of the xylanase and purification of the xylanase. Example 3 illustrates the use of the xylanase as a bleach booster during paper pulp production and Example 4 illustrates the use of the xylanase as a baking agent.

Detailed Description Text (165):
This example illustrates the use of the xylanase according to the invention as a baking agent.

Detailed Description Text (166):
Xylanase (the designation pentosanase is commonly used in the baking industry) is used as a baking agent for wheat bread for several purposes:

Detailed Description Text (173):
The prior art xylanase baking agents comprise several enzymatic activities, whereas the baking agent according to the invention easily can be produced with a very low content of enzymatic activities other than the xylanase activity. Thus, by use of the baking agent according to the invention bakery products with more constant characteristics from one baking operation to the next baking operation can be obtained.

Detailed Description Text (181):
Pentopan.TM., a commercial preparation available from Novo Nordisk A/S, is a prior art baking agent which contains different xylanases from H. insolens and also other H. insolens enzyme activities. It appears from the above that the xylanase according to the invention has a better performance than the prior art baking agent as it provides larger volume and softer crumb. The most important baking advantage in relation to the xylanase according to the invention, in comparison to the prior art xylanase is the fact that the xylanase according to the invention can be used as a baking agent with practically no side activities, and thus is able to generate bread with very uniform properties from batch to batch.

CLAIMS:

30. A method for preparing a wheat bread, comprising baking a wheat dough in the presence of a xylanase according to claim 1.

Previous Doc Next Doc Go to Doc#